Chapter V. Plan Implementation

The goals, objectives and planned activities presented in the previous chapters represent part of the framework for an annual work plan that will be developed and carried out by the Land Resources Division over the next five years. By its nature, this work plan will need to adapt to changing local conditions, public demands, policy decisions and fiscal constraints.

Chapter I noted that one of the requirements for county LWRM plans is to describe procedures that will be used to implement the nonpoint pollution performance standards and prohibitions under NR 151. This is because counties are named as the primary responsible party to implement the new standards, especially in the rural areas. Another plan requirement is to estimate costs associated with plan implementation. This chapter is intended to satisfy both of these requirements.

Agricultural Performance Standards

Below is a summary of the statewide agricultural nonpoint pollution performance standards:

- Soil erosion rates on all cropland must be maintained at or below "T". [Note: "T" is the tolerable erosion rate for each soil type to maintain its productivity indefinitely. T-values generally range from 3-5 tons per acre per year and are documented in the NRCS Technical Guide.]
- Starting in 2005 for high priority areas such as impaired or exceptional waters, and 2008 for all other areas, application of manure or other nutrients to croplands must be done in accordance with a nutrient management plan, designed to meet state standards for limiting the entry of nutrients into groundwater or surface water resources.
- Clean water runoff must be diverted away from contacting feedlots, manure storage facilities, and barnyards in water quality management areas (areas within 300 feet of a stream, 1000 feet from a lake, or areas susceptible to groundwater contamination).
- All new or substantially altered manure storage facilities must meet current engineering design standards to prevent surface or groundwater pollution.

The following manure management prohibitions also apply statewide:

- No direct runoff from animal feedlots to "waters of the state".
- No overflowing manure storage facilities.
- No unconfined manure piles in shoreland areas (areas within 300 of a stream, 1000 feet from lakes).
- No unlimited livestock access to "waters of the state" where the livestock prevent sustaining an adequate vegetative cover.

Implementation Procedures

To implement the above noted standards and prohibitions fairly in the agricultural areas, a systematic and comprehensive approach will be required. The LRD anticipates entering into a Memorandum of Understanding (MOU) with the DNR at some point in the future. Specific roles and responsibilities would be negotiated during the framing of the agreement. However, the strategy for implementation detailed below is a likely process for implementation with some need for flexibility as program experience develops and fiscal conditions may dictate. In the following sections, the term "landowner" is used generically to describe the person responsible for compliance with the above noted standards.

Step 1. Conduct information and education activities.

The LRD will distribute information and educational material prepared by the DNR, DATCP and LRD to relevant landowners. The information may be distributed via newsletters, public information meetings, and one-on one contacts.

The educational materials will be designed to achieve the following objectives:

- Educate landowners about Wisconsin's agricultural performance standards and prohibitions, county ordinances, applicable conservation practices, and cost share grant opportunities;
- Promote voluntary implementation of conservation practices necessary to meet the performance standards and prohibitions;
- Inform landowners of compliance procedures and agency roles to be used statewide and locally;
- Make landowners aware of expectations for compliance and consequences for noncompliance.

Step 2. Systematically select and evaluate parcels for compliance with standards and prohibitions (Priority Farms Strategy).

The LRD will use the Waukesha County Land Information System as a tool to identify priority farms for compliance determinations, track progress on implementing performance standards and meet reporting requirements.

Color digital orthophotos from spring 2005 will be used as a base map for initial screening. Using county 2-foot contour maps and water resource layers, Water Quality Management Areas (300 feet from a stream or 1000 feet from a lake) are delineated. This is the same area defined as the Shoreland Zone for the Waukesha County Planning and Zoning Division. Digital land units from the USDA-Farm Service Agency are used to identify field boundaries. This information is supplemented with an LRD generated digital map of existing farm operations. Information from the Soil Survey may also be used to identify "potential" locations of runoff or groundwater problems. These data layers combined with a hydrologic data layer identifying water resources including warm and cold water streams, lakes, and impaired waters (303d list) is then combined to locate potential problem areas within the Water Quality Management Area. Agricultural fields and livestock operations within this area can be identified and a list of owners for contacting generated from the Land Information System parcel maps.

Once the list of landowners is created, LRD staff can conduct a records inventory search for files related to conservation planning within the department. This is an initial review to determine potential compliance with the performance standards based on past or present program participation. If no records are found, or if the records are found to be out of date with existing farming operations, an on-site farm visit will be scheduled.

In initial stages of implementation, watersheds with cold water streams, ORW's, ERW's and impaired waters will be selected as the high priority areas, focusing on lands not slated for development in the near future. Landowners within these watersheds will be contacted for compliance evaluation based on initial screening data noted above. Additional priority producers and livestock operations for on-site review may be identified through complaints or staff observations.

Step 3. Document and report compliance status.

Following completion of records review and on-site evaluations, a **NR 151 Status Report** will be prepared and issued to owners of the parcel evaluated. This report will convey at a minimum:

- Current status of compliance of individual parcels with each of the performance standards and prohibitions.
- Corrective measure options and rough cost estimates to comply with each of the performance standards and prohibitions for which a parcel is not in compliance.
- Status of eligibility for cost sharing.
- Grant funding sources and technical assistance available from federal, state, and local government, and third party service providers.
- An explanation of conditions that apply if public cost share funds are used.
- A timeline for completing corrective measures, if necessary.
- Signature lines indicating landowner agreement or disagreement with report findings.
- Process and procedures for contesting evaluation results to the county.
- A copy of performance standards, prohibitions and technical design standards.

All evaluations and compliance information will be kept as public record in accordance with the procedures documented by the Waukesha County Department of Parks and Land Use.

If a landowner agrees with the initial compliance determination and no corrective actions are required, a **Letter of NR 151 Compliance** will be issued (See Step 5) and the site mapped appropriately on the Waukesha County Land Information System.

If a landowner disagrees with the initial compliance determination, the landowner may meet and discuss concerns with the LRD regarding the compliance determination process and results. If, after discussing the **NR 151 Status Report** with the LRD, the landowner still disagrees with conclusions of the LRD, the landowner may choose to follow the state appeals process to be detailed in the anticipated MOU between the LRD and the DNR.

Step 4. Offer or arrange for technical assistance. Make cost sharing available as needed to install or implement best management practices (BMPs).

If a site is determined to be out of compliance with the state standards, technical assistance and cost sharing will be offered to the landowner to upgrade the site(s) and bring them into compliance. A list of conservation practices likely to be utilized to meet state performance standards and potential sources of cost-share funding is found in Appendix D. If no cost sharing is available, a landowner is not required to comply until such time that cost sharing becomes available. However, if cost sharing is offered, and a landowner still refuses to make the corrective actions needed to bring the site into compliance, future cost sharing is not required.

Step 5. Administer funding and technical assistance. Re-evaluate parcel.

Once a landowner agrees to implement the corrective actions to bring the site into compliance with the state standards, and if cost sharing is involved, the cost share agreement and schedule for implementation will be executed. If technical assistance is required it will be arranged for through appropriate agencies/staff with the proper engineering job approval or conservation planning certifications.

After the corrective measures are applied, the site will be re-evaluated to determine if the parcel is now in compliance with the relevant performance standards or prohibitions. If the site is in compliance, the **NR 151 Status Report** will be updated to include a **Letter of NR 151 Compliance**. This would serve as official notification that the site has been determined to now be in compliance with applicable performance standards and prohibitions. Under NR 151, once a site is determined to be in compliance, it

is required that the site remains in compliance for perpetuity without additional cost sharing being required.

Step 6. Issue required notices and enforcement activities.

Following compliance status notification, if appropriate action is not taken by the landowner/operator in a reasonable amount of time as detailed in the **NR 151 Status Report**, enforcement action may commence. Generally, a **NR 151 Violation Letter** would be sent via certified mail to notify the landowner of the violation and explain possible enforcement action that may follow. It is anticipated that the LRD would refer the case to the DNR for further enforcement, depending on the outcome of the MOU described earlier.

Step 7. Monitor compliance with state standards and prohibitions

Monitoring progress on implementing the performance standards and prohibitions will be done using the Waukesha County Land Information System and a Compliance Tracking database developed by the LRD. This may be done as random spot checks or through Operation and Maintenance checks on sites previously cost shared through Priority Watershed programs.

Step 8. Annual reporting

Annual reports will be compiled to track progress on implementing performance standards and prohibitions. The Land Information System will be utilized to map location and compliance status on a parcel basis. Other information such as numbers and types of notifications sent, cost sharing offered and other data required to be submitted in annual reports to DATCP and DNR will be collected by the LRD.

Buffer Standards

When the administrative rules concerning the redesign of the state nonpoint pollution control program were being debated in 2000 and 2001, there was disagreement about what role vegetative buffers should have in the performance standards. In order for the rest of the administrative rules to move forward, the DNR agreed to remove the buffer language from the draft rules and revisit the issue at a later date. The Wisconsin Buffer Initiative, led by the University of Wisconsin, was assigned the duty to conduct additional research on the topic and make recommendations for implementation. In fact, one of the research sites is located on the Koepke farm in the Town of Oconomowoc.

When the DNR adopts a buffer standard for NR 151, the LRD plans to incorporate it into local program efforts and revise annual work plans as necessary. At present, voluntary programs such as the Conservation Reserve Enhancement Program (CREP) have minimum buffer widths based on program goals and technical standards. However, participation in this program in Waukesha County has been very low.

Nonagricultural Performance Standards

Runoff pollution from urban lands can be the leading cause of water quality problems in some areas. Inventory results from the Upper Fox River Priority Watershed Program revealed that runoff from construction sites was the leading source of runoff pollution in that watershed representing 62% of the total runoff pollutants. The other sources of pollutants included urban runoff from already developed sites (23%), cropland (10%), and eroding stream banks (5%). As in rural areas the number one pollutant

is sediment, or small bits of soil particles washed into streams and lakes. Attached to the soil particles are nutrients such as phosphorus that fuels the growth of algae and weeds in bodies of water. Other pollutants from urban areas include flakes of metal from vehicles, particles from vehicle exhaust, bits of tire and brake linings, soot from smokestacks, lead, zinc, pet waste, leaves and grass clippings and a variety of chemical compounds. A list of urban conservation practices to be utilized to meet state performance standards is contained in Appendix D.

New Construction Sites

Recognizing the need to control urban sediment sources and as part of the implementation of the Priority Watershed Program, Waukesha County adopted a Construction Site Erosion Control Ordinance in 1992. This type of ordinance only applies to new construction sites. A few years later, the Waukesha County Land Conservation Division (now the Land Resources Division) convened a storm water management workgroup. The goal of the workgroup was to "establish storm water management performance standards which will be consistently applied throughout all municipal jurisdictions in Waukesha County and effectively abate storm water derived pollutants and mitigate the impact of storm water flows."

The storm water management performance standards developed by the workgroup were integrated into the existing Construction Site Erosion Control Ordinance. The Waukesha County Construction Site Erosion Control and Storm Water Management Ordinance was adopted by the Waukesha County Board on March 24, 1998. The ordinance set forth performance standards for both storm water quantity and quality standards that would apply to all new developments in the unincorporated areas. Similar ordinances were subsequently adopted by most of the cities and villages in the county.

Following the publication of non-agricultural nonpoint performance standards in Administrative Rule NR 151 in 2002, and the subsequent update to storm water discharge permit requirements under Administrative Rule NR 216 in 2004, it became necessary to update the Waukesha County ordinance. This is because three of the towns covered by the county ordinance were subject to enforcing the new performance standards as a condition of a municipal permit under NR 216, as described further in the next section.

A summary of the urban performance standards for new construction sites include:

- Control 80% of sediment from construction sites.
- Control 80% of post-construction total suspended solids (TSS) from new developments and 40% from redevelopments.
- Maintain pre-development peak discharge rates for the 2-year, 24 hour design storm for new developments.
- Infiltrate 90% of pre-development runoff volumes for new residential developments and 60% for non-residential.
- Maintain protective areas (50-75 feet) between new impervious surfaces and lakes, streams, and wetlands.
- Control petroleum runoff (visible sheen) from fueling and vehicle maintenance areas.

Starting in August 2004, the LRD worked with the Waukesha County Storm Water Advisory Committee over the period of seven months to rewrite the county ordinance to reflect the new performance standards and address a number of other implementation issues identified by the LRD. In March of 2005, the Waukesha County Board adopted the new Waukesha County Storm Water Management and Erosion Control Ordinance. A copy of the ordinance is available on the LRD's web page at www.waukeshacounty.gov/landconservation. Enforcement of this ordinance currently represents the largest workload for the LRD, resulting in an average of 100 permits per year. It should be noted that

local erosion control ordinances do not apply to single-family home construction as these are regulated under COM 21 Wisconsin Administrative Code. By state statute, COM 21 supercedes all local ordinances.

As a budget initiative for 2006, the LRD will be pursuing status as an "authorized local program" by the DNR under the provisions of NR 216.415 for regulating storm water discharges from new construction sites within the jurisdiction of the county ordinance. This would streamline the regulatory framework that land development contractors and the county must work within to secure the necessary permits before beginning development or road projects.

Municipal Storm Water Discharge Permits

Administrative Rule NR 216 also contains storm water permitting requirements for communities, designed to treat discharges from municipal storm sewer systems. Phase I of these requirements applied to several communities on the eastern edge of the county, which were permitted along with other cities draining to the Menomonee and Root River Watersheds. Eight communities in the Upper Fox River Watershed (upstream from Waukesha) were also required to obtain a municipal storm water discharge permit under Phase I. Waukesha County is subject to this permitting requirement under Phase II of the rule implementation. A list of all communities in Waukesha County required to obtain permits for storm water discharge under NR 216 is contained in Table V-1. The county submitted a "Notice of Intent to Apply" for this permit in March of 2003, but has not had any response yet from DNR. This permit will apply to all county-owned storm sewer systems, such as the one draining the county airport and Expo grounds. It is unclear at this point what activities may be involved to meet the county's own discharge permit requirements under NR 216. Once these are established, they will be incorporated into future LRD work plans.

Table V-1
Waukesha County Communities Requiring NR 216 Permits

	Phase I Comm	unities	Phase II Communities			
Cities	Towns	Villages	Cities	Towns	Villages	
Brookfield	Brookfield	Butler	Delafield	Genesee	Big Bend	
New Berlin	Delafield	Elm Grove	Muskego	Merton	Chenequa	
Pewaukee	Lisbon	Menomonee Falls	Oconomowoc	Oconomowoc	Dousman	
Waukesha	Waukesha	Pewaukee		Ottawa	Hartland	
		Sussex		Summit	Lac La Belle	
				Vernon	Lannon	
					Merton	
			County Waukesha County		Nashotah	
					North Prairie	
					Oconomowoc Lake	
					Wales	

The NR 216 municipal permitting system has led to intergovernmental cooperation among a number of local communities involved. The LRD is currently working on intergovernmental agreements with the Towns of Lisbon, Delafield and Waukesha to help them satisfy a permit condition of enforcing the nonpoint performance standards for new construction sites. The agreements would allow the towns to meet this requirement through the LRD's enforcement of the Waukesha County Storm Water

Management and Erosion Control Ordinance. In addition, eight communities have agreed to contract with the LRD to meet the information and education requirements under their discharge permits. These agreements are planned to take effect starting in 2006. Activities include (but are not limited to): workshops and presentations, storm drain stenciling, water quality monitoring, brochures, newsletters and other methods to reach the target audience. More details on these activities are presented in the Activity Plan in Chapter IV.

Estimated Costs

Since this plan does not have the authority to establish fiscal policy for the county, the estimated costs provided below are solely intended to satisfy state LWRM planning requirements and do not in any way show anticipated LRD budgets. Due to the current fiscal constraints imposed by state and local policy makers, it is assumed that no additional staff resources will be made available to implement this plan beyond what is currently allocated to land and water conservation programs in the county (approximately 6 FTE). The cost estimates contained in Table V-2 are based on average annual inflationary costs to maintain existing program efforts and staffing levels.

The cost-sharing estimates in Table V-2 and V-3 are based on a statutory requirement of 70% cost-sharing and are totally dependent on landowner needs to comply with the state performance standards described earlier in this chapter. Since 90% of cropland is estimated to already comply with the erosion control requirements, and there are few livestock operators in the county, these costs are estimated to be nominal compared to other Wisconsin counties. However, if a standard is established for stream buffers, and nutrient management standards are enforced, these costs could be more significant. This is why the cost estimates are projected to increase as shown.

Table V-3 is provided to demonstrate the future state grant needs to continue supporting existing staff, based on current state statutory obligations. Under section 92.14 Wisconsin Statutes, the Department of Agriculture, Trade and Consumer Protection is directed to provide base staff funding for an average of three positions per county at a rate of 100% for the first position, 70% for the second position and 50% for the third position. Average salary increases and inflationary costs represent the increases shown each year. Cost-sharing is assumed to be available from federal and state sources at equal levels in Table V-3.

 $\label{eq:V-2} Table~V-2$ Estimated Total Costs for Plan Implementation 2006-2010

Cost Category	2006	2007	2008	2009	2010
Personnel (S&B)	\$450,000	\$472,500	\$496,100	\$520, 900	\$547,000
Operating Expenses	\$55,000	\$56,650	\$58,350	\$60,100	\$61,900
Landowner Cost- Sharing	\$60,000	\$80,000	\$120,000	\$120,000	\$120,000
Total Costs	\$565,000	\$609,150	\$674,450	\$701,000	\$728,900

 $Table\ V-3$ Estimated Minimum State Costs to Support Plan Implementation 2006-2010

Cost Category	2006	2007	2008	2009	2010
State Staffing Grant Obligation	\$188,400	\$197,800	\$207,700	\$218,100	\$229,000
Landowner Cost- Sharing	\$30,000	\$40,000	\$60,000	\$60,000	\$60,000
Total State Costs	\$218,400	\$237,800	\$267,700	\$278,100	\$289,000

Summary

The procedures and cost estimates outlined in this chapter represent the best estimates of the LRD at the time of plan preparation and are all subject to change. No attempt is made to identify the source of funding beyond the assumptions noted above. All of the estimated costs are subject to the annual budget processes at the county, state and federal levels. The LRD will make every attempt to take advantage of the wide array of grants and partnerships that may be available through public or private sources to implement this plan.